PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY To: WRITTEN OPINION OF THE see form PCT/ISA/220 INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43*bis*.1) Date of mailing (day/month/year) see form PCT/ISA/210 (second sheet) Applicant's or agent's file reference FOR FURTHER ACTION see form PCT/ISA/220 See paragraph 2 below International application No. International filing date (day/month/year) Priority date (day/month/year) PCT/BE2005/000150 24.10.2005 25.10.2004 International Patent Classification (IPC) or both national classification and IPC INV. B32B5/02 B32B27/12 MONDI BELCOAT, NAAMLOZE VENNOOTSCHAP This opinion contains indications relating to the following items: 1. Box No. 1 Basis of the opinion ☐ Box No. II **Priority** ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability ☐ Box No. IV Lack of unity of invention ☑ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement Box No. VI Certain documents cited Box No. VII Certain defects in the international application ☐ Box No. VIII Certain observations on the international application **FURTHER ACTION** If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220. 3. For further details, see notes to Form PCT/ISA/220. Name and mailing address of the ISA: **Authorized Officer**



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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/BE2005/000150

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	Bo	x N	o. I Basis of the opinion				
1.	Wit the	With regard to the language , this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.					
	This opinion has been established on the basis of a translation from the original language into the following language, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).						
2.	Wit nec	With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:					
	a. type of material:						
	į		a sequence listing				
	ſ		table(s) related to the sequence listing				
b. format of material:							
	[in written format				
	[in computer readable form				
	c. ti	me	of filing/furnishing:				
contained in the international application as filed.			contained in the international application as filed.				
	[filed together with the international application in computer readable form.				
	[furnished subsequently to this Authority for the purposes of search.				
3.		co	addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto s been filed or furnished, the required statements that the information in the subsequent or additional pies is identical to that in the application as filed or does not go beyond the application as filed, as propriate, were furnished.				
4.	Additional comments:						

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/BE2005/000150

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

2-19

No:

1

Inventive step (IS)

Yes: Claims

No:

Claims

Claims

1-19

Industrial applicability (IA)

Yes: Claims

1-19

No: Claims

2. Citations and explanations

see separate sheet

Box No. VI Certain documents cited

1. Certain published documents (Rules 43bis.1 and 70.10)

and /or

2. Non-written disclosures (Rules 43bis.1 and 70.9)

see form 210

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

International application No.

PCT/BE2005/000150

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

D1: US 2004/234744 A1 (BYMA GEORGE B ET AL) 25 November 2004

D2: US 2004/235378 A1 (BYMA GEORGE B ET AL) 25 November 2004

D3: US-A-4 374 059 (WAGNER ET AL) 15 February 1983

1) Novelty

The present application does not satisfy the criterion set forth in Article 33(2) PCT because the subject-matter of Claim 1 is not novel in respect of prior art as defined in the regulations (Rule 64(1)-(3) PCT):

D3 defines (cl. 1, 25, 6; ex. 1, 3) a container comprising a basalt-fiber reinforced polymer next to a thermoplastic film, thereby anticipating subject-matter of present claim 1.

Re Item VI

Certain cited, published documents (Rule 70.10 PCT):

Application No Patent No	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
US'04/234744 (D1)	Nov. 25, 2004	May 19, 2003	May 19, 2003
US'04/235378 (D2)	Nov. 25, 2004	May 19, 2003	May 19, 2003

D1 discloses the subject-matter of present claims 1,2,4-6,9,13,14 (cf. ref. in search report). Basalt fibers in a 'structural reinforcement layer' next to a thermoplastic layer are defined in claim 1. Paragraph 28 also addresses the **identical problem of thermal recycling** (solved by the basalt fibers).

Process claims 6 & 11 of D1 fall under the genus of present process claim 14 comprising the steps supplying - providing - pressing - cooling.

D2 is almost identical with D1 in teaching, features, drawings and wording, anticipating claims 1, 4-6 and 13.

2) Inventive Step

The present application does not seem to satisfy the criterion set forth in Article 33(3) PCT because the subject-matter of Claims 2-19 does not seem to involve an inventive step (Rule 65(1)(2) PCT): holes or perforations in an inner layer and/or adhesive intermediate layers as means for anchorage of outer thermoplastic layers are known in the prior art (no document cited here).

Furthermore its is noticed that claims 3 and 18, as well as figure 3 teach perforations *after* the completion of the laminate, hence there seems to be no contribution to the anchorage.

However, D3 as single prior art acc. to Rule 64(1) PCT does not teach the good use of basalt fibers in thermal recycling of thermoplastic films (which is the objective problem; appl. page 1).

Re Item VII

3) To meet the requirements of Rule 5.1(a)(ii) PCT, the documents **D1-D3** should be identified in the description and the relevant background art disclosed therein should be briefly discussed.